Abstract

The invention provides a method to introduce a selected nucleic acid sequence into an airway epithelial cell that involves contacting the airway epithelial cell with a pseudotyped retrovirus that includes a glycoprotein in which a portion of an O-glycosylation region within the glycoprotein has been deleted and a retroviral capsid that includes the selected nucleic acid sequence. The invention also provides a method to reduce or eliminate the symptoms of cystic fibrosis in a mammal that involves contacting an airway epithelial cell of the mammal with a pseudotyped retrovirus that includes a glycoprotein in which a portion of an O-glycosylation region within the glycoprotein has been deleted and a retroviral capsid that includes a nucleic acid sequence that encodes a cystic fibrosis transmembrane regulator protein.

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